



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/759,261	01/19/2004	William Freeman	15436.121.1.1	6915
22913 7590 02/25/2008 WORKMAN NYDEGGER 60 EAST SOUTH TEMPLE 1000 EAGLE GATE TOWER SALT LAKE CITY, UT 84111				
EXAMINER				
BLACKWELL, GWENDOLYN ANNETTE				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
02/25/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/759,261

**Applicant(s)**

FREEMAN ET AL.

**Examiner**

Gwendolyn Blackwell

**Art Unit**

1794

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 7-11 and 16-28 is/are pending in the application.
- 4a) Of the above claim(s) 16-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-11, 27 and 28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

*(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.*

2. Claims 1-3, 5, 7-10, and 27-28, are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent no. 5,668,663, Varaprasad et al.

*Regarding claims 1 and 8*

Varaprasad et al disclose an electrochromic device, such as a window (column 1, lines 6-11) comprised of first and second substrates positioned in a spaced apart relationship being substantially parallel. First and second conductive electrodes are positioned on the inner surfaces (the surfaces that face each other) of the first and second substrates, (columns 13-14, lines 45-41). Between the conductive electrodes, an electrochromic material layer and an electrolyte material layer (the combined electrochromic layer/electrolyte layer form Applicant's attenuation layer) are formed, (column 7, lines 53-64). The electrolyte material is comprised of redox reaction promoters and alkali ions and/or protons wherein one of the alkali ions may be lithium methacrylate (photopolymerizable element), (columns 8-10, lines 56-58). As the lithium methacrylate of the prior art meets the limitations of Applicant's photopolymerizable element (see spec., page 14, section 045), it would be expected that the methacrylate of the prior art

would provide the bonding attributes as claimed by Applicant, absent an objective showing to the contrary, meeting the limitations of claims 1 and 8.

*Regarding claims 2-3, 5, 7, 9-10, and 27-28*

The substrates can be formed of glass, (column 13, lines 26-41), meeting the limitations of claims 2 and 9.

The electrodes and glass substrates are transparent and transmissive in part in the visible portion of the electromagnetic spectrum, (column 15, lines 6-65), meeting the limitations of claims 3 and 10. As light passes through the electrolyte layer, a portion of the electromagnetic spectrum is absorbed (attenuated), (columns 11-12, lines 61-8), meeting the limitations of claim 5.

The electrochromic/electrolyte layers are activated by an applied potential between the conductive electrode coatings by any source of an alternating current or a direct current (voltage), (column 23, lines 39-49), meeting the limitations of claim 7.

As the lithium methacrylate is present in the electrolyte that is located between the first and second electrodes (first and second electrically conductive layer), it would be expected that as the structure and the composition of the prior art monomer meets those as claimed by Applicant, that the lithium methacrylate of the prior art would also serve to bond the entire layer structure located between the electrodes to the electrodes, absent an objective showing to the contrary, meeting the limitations of claims 27-28.

3. Claims 1-5, 7-11, and 27-28 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent no. 6,193,378, Tonar et al.

*Regarding claims 1, 4, 8, and 11*

Tonar et al disclose an electrochromic device that can be a window, (column 11, lines 47-50 and column 12, lines 53-57). The device is comprised of first and second substrates with a first electrode on the inner surface of the first substrate and a second electrode on the inner surface of the second substrates wherein the two substrates are in a spaced apart relationship with an electrochromic element formed between the two electrodes, (column 3, lines 38-67). The electrochromic element is comprised of an electrolyte and an electrochromic medium, (column 4, lines 46-67). The example demonstrates that the electrochromic medium also contains polymethylmethacrylate (photopolymerizable monomer). As the polymethylmethacrylate of the prior art meets the limitations of Applicant's photopolymerizable element (see spec., page 14, section 045), it would be expected that the polymethylmethacrylate of the prior art would provide the bonding attributes as claimed by Applicant, (column 10, lines 32-37).

*Regarding claims 2-3, 5, 7, 9-10, and 27-28*

The substrates are made of glass, (column 10, lines 17-24), meeting the limitations of claims 2 and 9.

The conductive electrodes are transparent, which would allow for the transmission of at least a portion of visible light, (column 3, lines 57-65), meeting the limitations of claims 3 and 10.

As the prior art meets the layer structure as set forth by Applicant in claim 5, it would be expected that the structure of Tonar et al would meet the physical limitations as set forth in claim 5, absent an objective showing to the contrary.

The reflectivity of electrochromic element is activated through the use of an applied voltage, (column 3, lines 37-41), meeting the limitations of claim 7.

As the polymethylmethacrylate is present in the electrochromic medium that is located between the first and second electrodes (first and second electrically conductive layer), it would be expected that as the structure and the composition of the prior art monomer meets those as claimed by Applicant, that the polymethylmethacrylate of the prior art would also serve to bond the entire layer structure located between the electrodes to the electrodes, absent an objective showing to the contrary, meeting the limitations of claims 27-28.

#### ***Response to Arguments***

4. Applicant's arguments filed December 5, 2007 have been fully considered but they are not persuasive. The previous rejections have been maintained. Additional arguments have been added to the claims to further clarify for Applicant the basis of inherency.

5. Applicant contends (1) that there is no basis for a claim of inherency that the materials of the prior art would provide the bonding properties as claimed by Applicant.

6. In Varaprasad, the electrolyte material is comprised of redox reaction promoters and alkali ions and/or protons wherein one of the alkali ions may be lithium methacrylate (photopolymerizable element), (columns 8-10, lines 56-58). As the lithium methacrylate of the prior art meets the limitations of Applicant's photopolymerizable element (see spec., page 14, section 045), it would be expected that the methacrylate of the prior art would provide the bonding attributes as claimed by Applicant, absent an objective showing to the contrary.

In Tonar, the example demonstrates that the electrochromic medium also contains polymethylmethacrylate (photopolymerizable monomer). As the polymethylmethacrylate of the prior art meets the limitations of Applicant's photopolymerizable element (see spec., page 14, section 045), it would be expected that the polymethylmethacrylate of the prior art would provide the bonding attributes as claimed by Applicant, (column 10, lines 32-37), absent an objective showing to the contrary.

"Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Applicant broadly claims in claims 1 and 8 a photopolymerizable monomer. Applicant specifically claims in claims 4 and 11 that the photopolymerizable monomer can be a polymethylmethacrylate or methylpentene. Varaprasad and Tonar disclose materials that fall within this category. Varaprasad specifically disclose lithium methacrylate. Tonar specifically discloses polymethylmethacrylate. As the materials of the prior art meets Applicant's claimed compositional limitations it would be expected that the materials of the prior art would also act as a bonding agent, absent an objective showing to the contrary. As Applicant has not provided any objective evidence to the contrary that the materials of the prior art would not act as a bonding agent, the rejections will be maintained.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

/Gwendolyn Blackwell/  
Primary Examiner, Art Unit 1794